

WHAT IS CLAIMED IS:

1. A machine spindle comprising:

a casing defining a center axis; and

a clamping mechanism disposed in the casing, the clamping mechanism comprising:

5 a front drawbar having axially spaced front and rear ends, the front end carrying a tool clamp operable to clamp a tool in response to rearward movement of the front drawbar,

a rear drawbar arranged behind the front drawbar;

10 a force transmitting mechanism for transmitting rearward motion of the rear drawbar to the front drawbar for movement of the front drawbar rearwardly;

a gas spring for biasing the rear drawbar rearwardly, comprising:

15 a housing disposed in the casing and defining a gas chamber having a front wall through which the rear drawbar extends, and

a piston disposed in the gas chamber for axial movement therein and releasably connected to a rear end of the rear drawbar by a releasable coupling disposed in the chamber.

2. The machine spindle according to claim 1 wherein the releasable coupling comprises a threaded coupling.

3. The machine spindle according to claim 2 wherein the threaded coupling comprises a male thread formed on the rear drawbar, and a female thread formed in the piston.

4. The machine spindle according to claim 1 wherein the rear drawbar includes a radial flange disposed in front of the front wall of the chamber and arranged to abut the front drawbar and the front wall during front and rear movement, of the rear drawbar.

5. The machine spindle according to claim 4 wherein the force-transmitting mechanism comprises a force-amplifier wedge arrangement disposed in front of the flange.